

GUNN TRANSCEIVERS Voltage Controlled

MO87127 - MO9140

Features

Electronic Frequency Control
High Doppler Sensitivity Levels
Low AM and FM Noise Levels
Direction-of-Motion Sensing
Compact Size
Pulsed Transceivers Available

Applications

FM Doppler Radar Systems
Altimeters
Police Radars
Intrusion Alarm Systems
Traffic Control Systems
Automotive Collision Avoidance Systems



Description

Microsemi's voltage controlled transceivers provide affordable frequency-modulated microwave power at fixed frequencies. The varactor tuning of the transceiver permits carrier frequency modulation for ranging information. These are CW transceivers; pulsed microwave transceivers are available on request.

Specifications @ 25°C

| Model Number | Frequency (GHz) ¹ | Min. Output Power (mW) | Frequency Drift/ Temperature (KHz/°C) | Nominal Sensitivity (dBc) | Min. Electronic Tuning Range (MHz) | Tuning Voltage (V _{DC}) | Operating Voltage (V _{DC}) | Typ. Operating Current (mA) |
|---|---------------------------------|---------------------------------|--|---------------------------------|--|---|--|--------------------------------------|
| X Band Voltage Controlled Transceivers | | | | | | | | |
| MO87127-1 | 10.30 | 10 | 400 | -110 | 40 | +1 to +20 | +8 to +10 | 200 |
| MO87127-2 | 10.30 | 20 | 400 | -110 | 40 | +1 to +20 | +8 to +10 | 600 |
| MO87127-3 | 10.30 | 35 | 400 | -110 | 40 | +1 to +20 | +8 to +10 | 600 |
| K Band Voltage Controlled Transceivers | | | | | | | | |
| MO9071 | 24.125 | 5 | 1000 | -90 | 50 | +1 to +20 | 5 | 150 |
| MO9072 ² | 24.125 | 5 | 1000 | -90 | 50 | +1 to +20 | 5 | 150 |
| MO87849 | 24.125 | 5 | 500 | -95 | 150 | +0.5 to +20 | +5 to +8 | 400 |
| MO87930 | 24.125 | 5 to 10 | 500 | -95 | 350 | 0 to +9 | +5 to +8 | 400 |
| Ka Band Voltage Controlled Transceivers | | | | | | | | |
| MO9410-1 | 35.5 ± 0.1 | 7.5 | 1000 | -90 | 100 | +1 to +20 | 3.5-6.0 | 350 |
| MO9410-2 | 34.7 ± 0.1 | 7.5 | 1000 | -90 | 100 | +1 to +20 | 3.5-6.0 | 350 |
| MO9410-3 | 33.8 ± 0.1 | 7.5 | 1000 | -90 | 100 | +1 to +20 | 3.5-6.0 | 350 |

^{1.} All X Band transceivers have built-in circulators.

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Operating temperature is -30°C to +70°C. Storage temperature is -40°C to +85°C.

^{2.} M09072 has dual IF output.

Other frequencies and power levels available upon request.

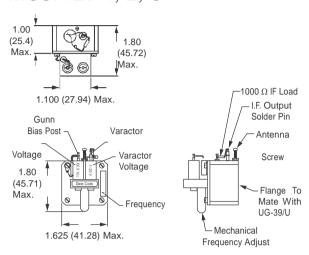


GUNN TRANSCEIVERS

Voltage Controlled

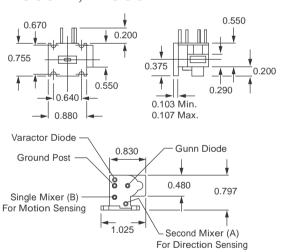
MO87127 - MO9140

MO87127-1, 2, 3



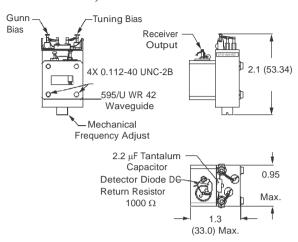
Dimensions are in inches

MO9071, MO9072



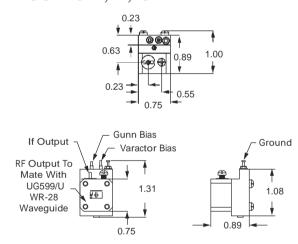
Dimensions are in inches.

MO87930, MO87849



Dimensions are in inches.

MO9410-1, 2, 3



Dimensions are in inches.